FIG.1

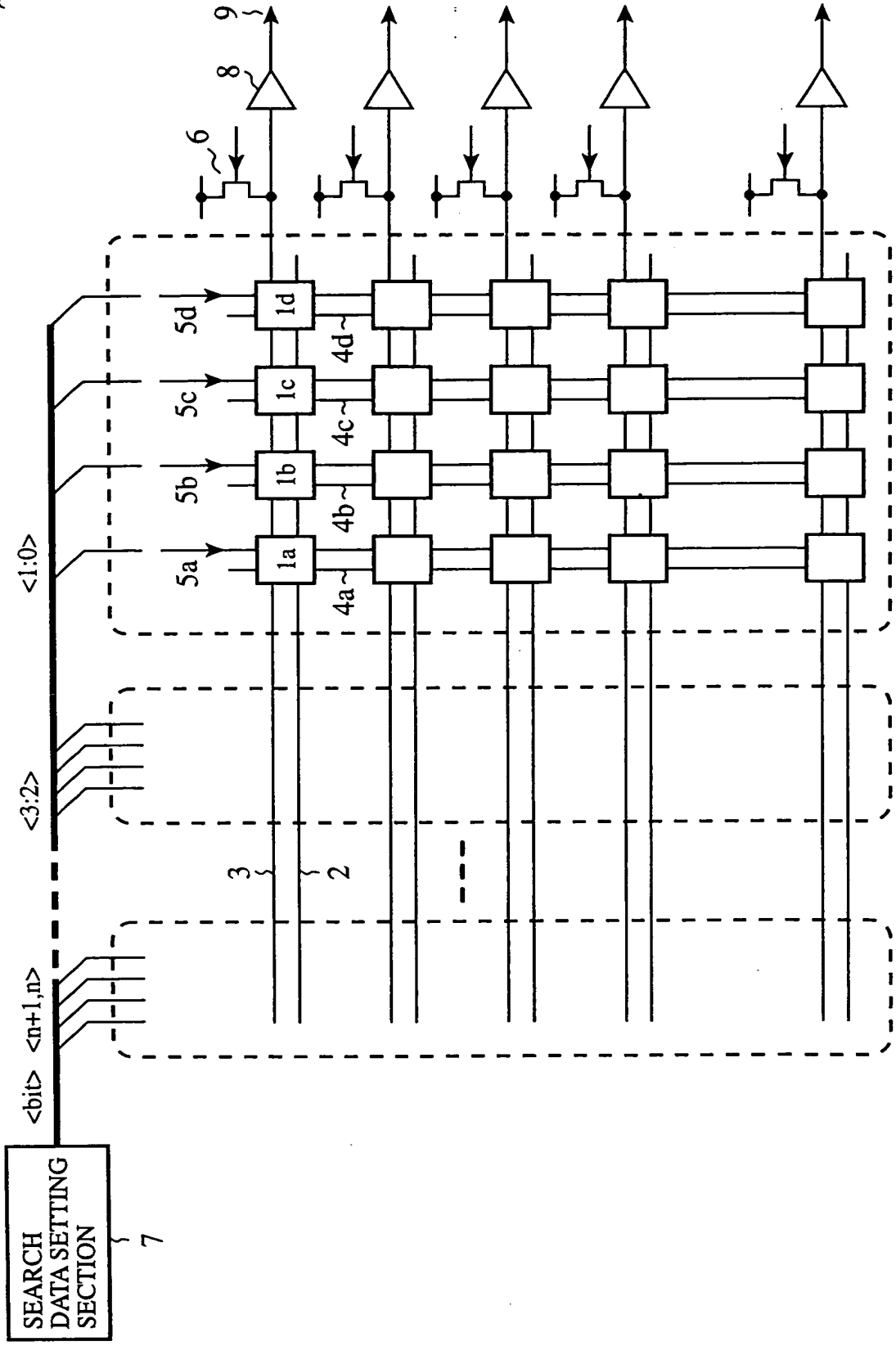

FIG.2

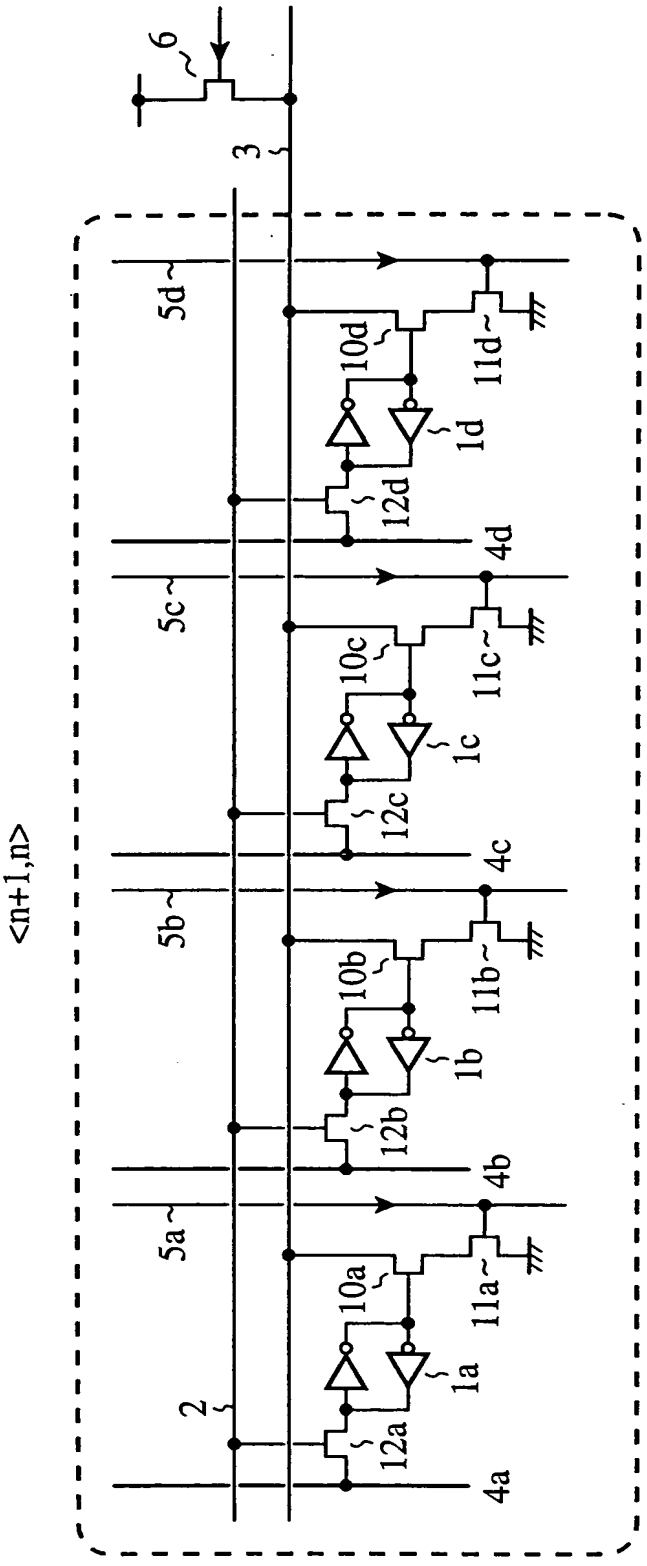
<n+1,n>
6
3
5d
5c
5b
5a
2
10d
11d
1d
12d
4d
10c
11c
1c
12c
4c
10b
11b
1b
12b
4b
10a
11a
1a
12a
4a

FIG.3

	SEARCH "00" 5a=1,5b=0,5c=0,5d=0	SEARCH "01" 5a=0,5b=1,5c=0,5d=0	SEARCH "10" 5a=0,5b=0,5c=1,5d=0	SEARCH "11" 5a=0,5b=0,5c=0,5d=1
STORE "xx" 1a=0,1b=0,1c=0,1d=0				
STORE "x0" 1a=0,1b=1,1c=0,1d=1		DISCHARGE		DISCHARGE
STORE "x1" 1a=1,1b=0,1c=1,1d=0	DISCHARGE		DISCHARGE	
STORE "0x" 1a=0,1b=0,1c=1,1d=1			DISCHARGE	DISCHARGE
STORE "00" 1a=0,1b=1,1c=1,1d=1		DISCHARGE	DISCHARGE	DISCHARGE
STORE "01" 1a=1,1b=0,1c=1,1d=1	DISCHARGE		DISCHARGE	DISCHARGE
STORE "1x" 1a=1,1b=1,1c=0,1d=0	DISCHARGE	DISCHARGE		
STORE "10" 1a=1,1b=1,1c=0,1d=1	DISCHARGE	DISCHARGE		DISCHARGE
STORE "11" 1a=1,1b=1,1c=1,1d=0	DISCHARGE	DISCHARGE	DISCHARGE	

APPLN. FILING DATE: NOVEMBER 19, 2003
TITLE: SEMICONDUCTOR MEMORY
INVENTOR(S): KAZUNARI INOUE
APPLN. SERIAL NO.: 10/715,455
SHEET 3 OF 9

FIG.4

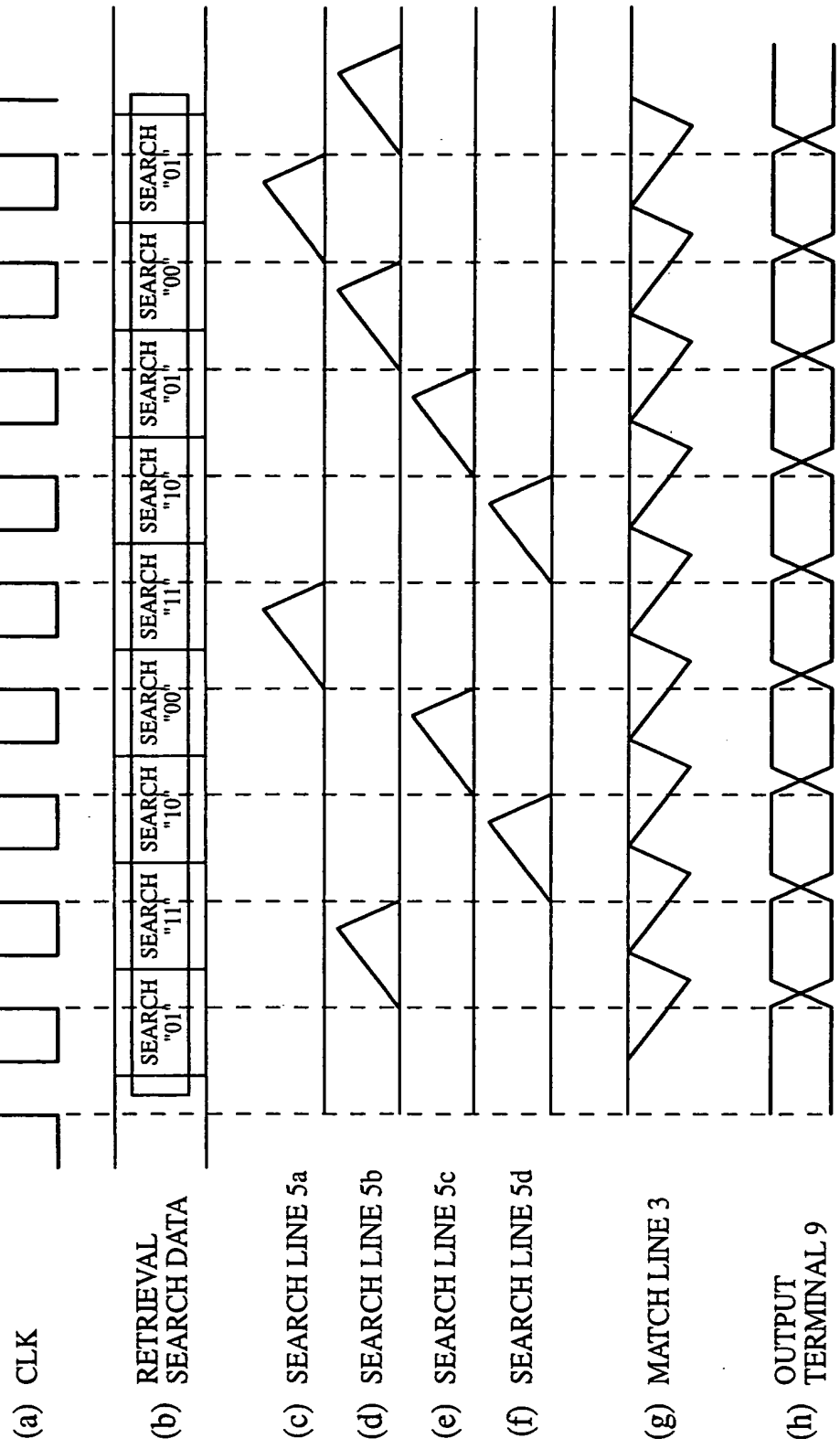
(a) CLK
(b) RETRIEVAL SEARCH DATA
SEARCH "01"
SEARCH "11"
SEARCH "10"
SEARCH "00"
SEARCH "11"
SEARCH "10"
SEARCH "01"
SEARCH "00"
SEARCH "01"
(c) SEARCH LINE 5a
(d) SEARCH LINE 5b
(e) SEARCH LINE 5c
(f) SEARCH LINE 5d
(g) MATCH LINE 3
(h) OUTPUT TERMINAL 9

FIG.5

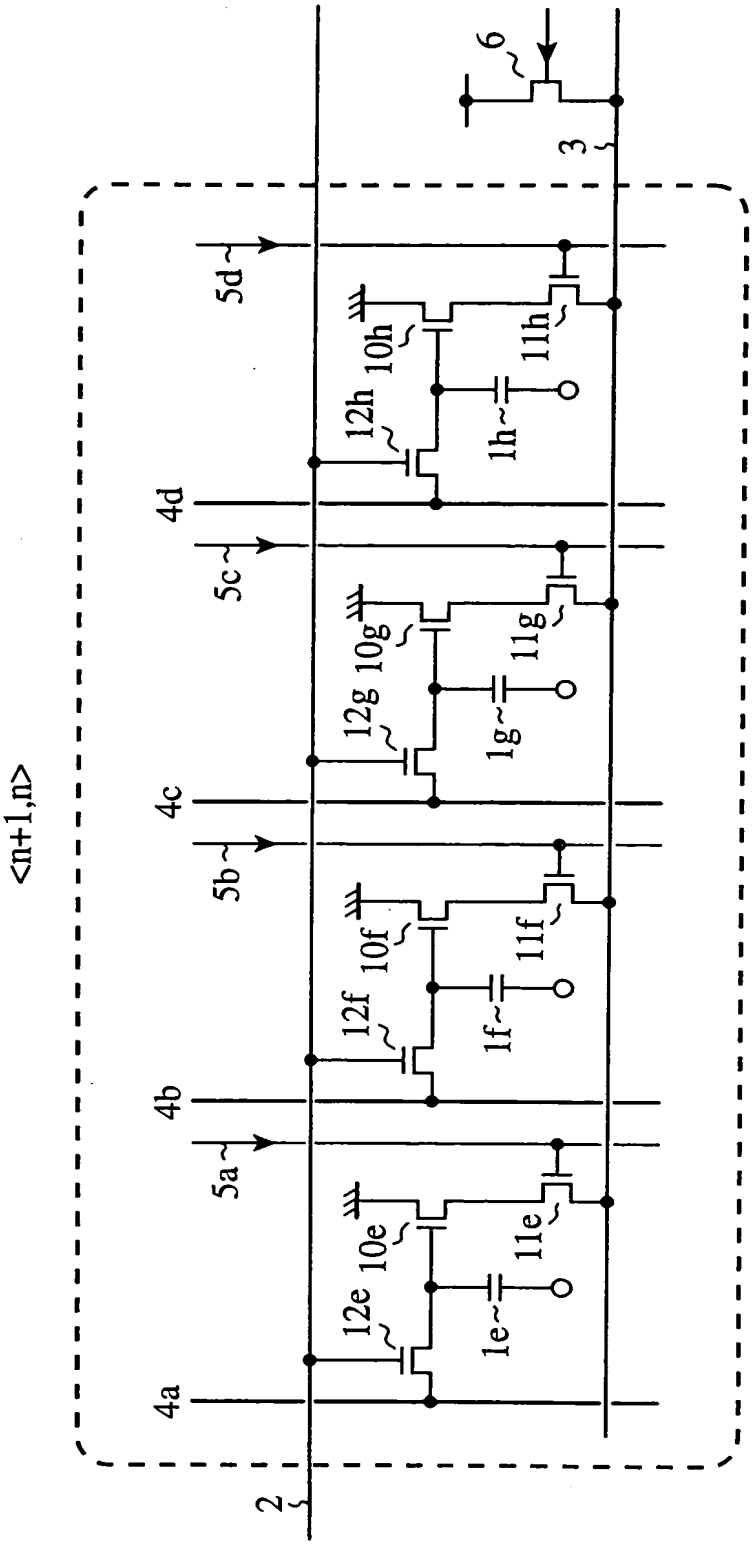
6
3
5d
12h
10h
11h
1h
4d
5c
12g
10g
11g
1g
4c
5b
12f
10f
11f
1f
4b
5a
12e
10e
11e
1e
4a
2
<n+1,n>

FIG.6

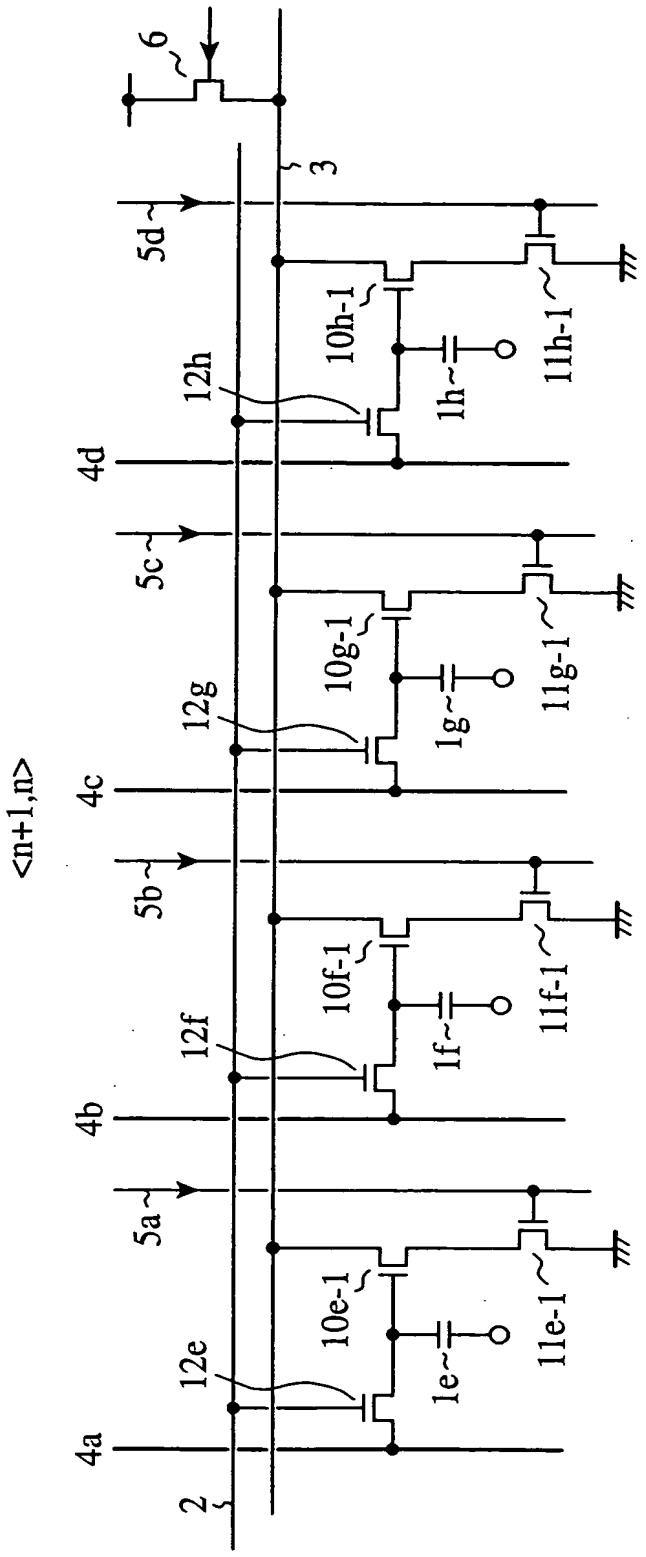
<n+1,n>
6
3
5d
5c
5b
5a
4d
4c
4b
4a
2
12h
12g
12f
12e
10h-1
10g-1
10f-1
10e-1
1h
1g
1f
1e
11h-1
11g-1
11f-1
11e-1

FIG.7B

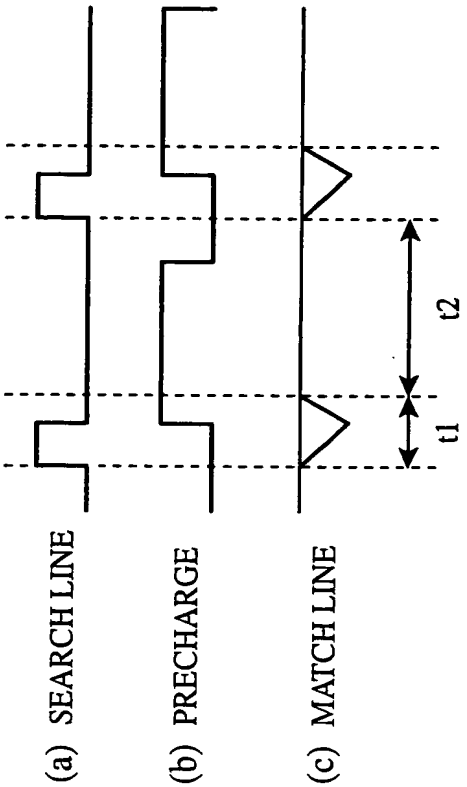

FIG.7A

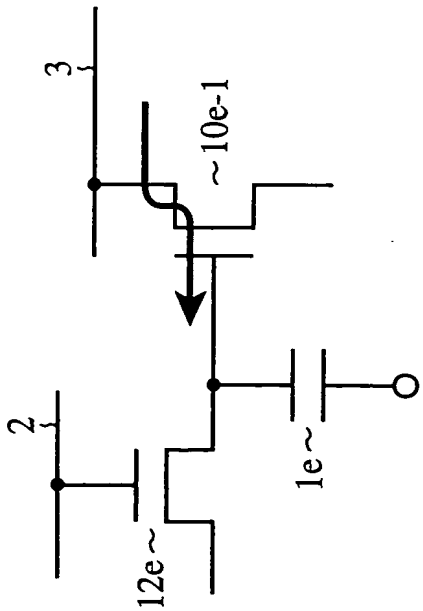

FIG.8

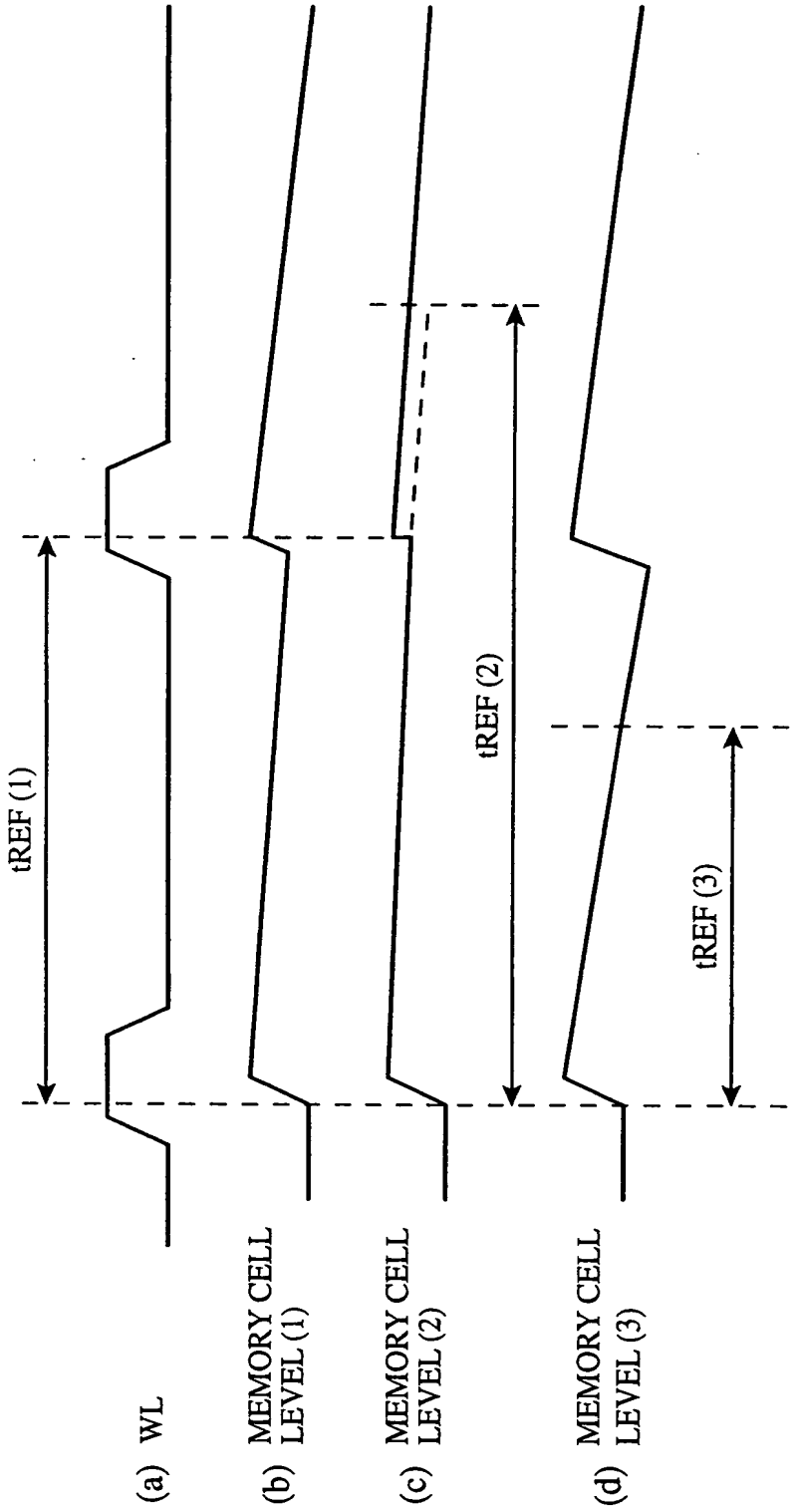
tREF (1)
tREF (2)
tREF (3)
(a) WL
(b) MEMORY CELL LEVEL (1)
(c) MEMORY CELL LEVEL (2)
(d) MEMORY CELL LEVEL (3)

FIG. 9 (PRIOR ART)